

REMARKS

Claims 377-426 are now pending in the application. Minor amendments have been made to the specification and claims to simply overcome the objections to the specification and rejections of the claims under 35 U.S.C. § 112. These amendments are not narrowing amendments. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

While Applicants disagree with the obviousness type double patenting, Applicants are enclosing herewith a terminal disclaimer with respect to U.S. Patent No. 6,871, 251 that overcomes the obviousness type double patenting rejection.

REJECTION UNDER 35 U.S.C. § 112

Claims 377-406, 415, and 425 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Examiner alleges that the specification fails to support the serial control data can include a variable number *m* of words. Applicants disagree. At a minimum, Paragraph [0070] of the specification clearly states:

The Serial Control Data Transfer utilizes the SCD pin to transfer important control information from HDC 22 to R/W channel 24 for both read and write operations. Each serial transfer contains one START bit followed by 10 bits of control data and one END bit. If the END bit goes low at the end of a transfer, it indicates the completion of the transfer. Otherwise, another 10 bits of control data and one END bit are expected. **Therefore, HDC 22 can transfer for unlimited number of times 10-bit control data to the R/W channel 24 as long as every END bit is "1".** This facility provides flexibility and allows for expandable and additional feature sets for any future development.

Therefore, if the end bit of the serial control data is set equal to one, an additional ten bits of serial control data is sent. This can occur for an unlimited number of times. Therefore, the specification supports the number of serial control data words can **indeed be variable**. Therefore, support for these claims is clearly present in the specification as filed and this rejection is improper.

This ability allows flexibility for future developments and new feature sets. Therefore, support for a serial control data having a variable number *m* of words is clearly present. This rejection is now moot.

Applicants have amended Claims 377, 387, 397, 415 and 425 to include a variable number *m* of words, which provides antecedent basis for "said *m* words". This rejection is now moot.

Claims 378-386, 388-396, and 398-406 are rejected because they incorporate the parent claims' limitation. This rejection is respectfully traversed.

Claims 377-406 are not currently rejected based on any prior art references and are therefore in allowable form.

REJECTION UNDER 35 U.S.C. § 103

Claims 407, 411, 417, and 421 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Sharma (U.S. Pat. No. 6,636,906). This rejection is respectfully traversed.

With respect to Claim 407, there are numerous aspects that are not taught or suggested by Sharma. For example, Sharma does not show, teach or suggest a hard disk controller or a read/write channel.

The Examiner does not identify what admitted prior art is being applied in the body of the rejection.

As best understood by Applicants, Sharma is directed to reading and writing to **cache**, which is **NOT** a **hard disk controller**. Sharma does not include a read/write channel as claimed.

In addition, the Examiner has failed to establish that the cache control data is a serial control signal. Applicants respectfully assert that it is more likely in a cache application that the cache control data is parallel and not serial. Sharma is silent on this issue.

Finally, since Sharma does not relate to hard disk drives, the control data relates to whether or not a cache line is split. Therefore it is cache split or non-split information. It is not data relating to whether a sector of a hard disk drive platter is a split sector or not.

It is a longstanding rule that to establish a prima facie case of obviousness of a claimed invention, **all of the claim limitations must be taught or suggested** by the prior art. *In re Royka*, 180 USPQ 143 (CCPA 1974), see MPEP §2143.03. Here, the Examiner fails to provide **any** reference that teaches a hard disk controller, a read/write channel, a serial control data signal, or split and non-split sector information.

Furthermore, when evaluating claims for obviousness under 35 U.S.C. §103, **all of the limitations must be considered and given weight**. *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), MPEP § 2144.03. Here, it is clear that the Examiner has given little or no consideration of the limitations relating to the hard disk controller, the read/write channel, the serial control data signal, or split and non-split sector information

and failed to give these limitations any weight. In effect, the Examiner has ignored these limitations.

Furthermore, the Examiner makes references to page 65, 3rd paragraph of Sharma on page 5, 3rd line from the bottom of the Office Action. Sharma does not include 65 pages. Applicant is unable to respond to this errant citation. Additional errant citations appear elsewhere in this rejection.

If the Examiner intends to continue to assert this improper rejection, Applicant respectfully requests that the Examiner correct his incorrect citations. Furthermore, Applicant respectfully requests that the Examiner identify specifically what “admitted prior art” he is relying upon and what motivation there is for making the proposed combination. Without this, the Examiner cannot sustain this rejection.

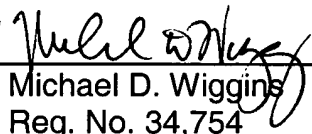
Applicants believe that Claim 407 is allowable for at least these reasons. Claim 417 is allowable for at least similar reasons. Claims 408-416 and 418-426 ultimately depend from Claims 407 and 417 and are allowable for at least similar reasons as Claim 407 and 417.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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